HEDS-EPA Database System for Public Access to Human Exposure Data

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Human Exposure Database System (HEDS) is an Internet-based system developed to provide public access to human exposure-related data from studies conducted by EPA's National Exposure Research Laboratory (NERL). HEDS was designed to work with the EPA Office of Research and Development's Environmental Information Management System (EIMS), using links to EIMS to provide searching capabilities and short abstracts for each study and its data sets. The data in HEDS will be from studies with peer-reviewed study designs and data quality assurance. Study documents, such as quality assurance plans and sample collection and analysis procedures, are provided. A data dictionary and code table are provided with each data set to detail what information is provided in the data set and explain the codes. The data are provided in text and database formats that can be used by most commercial software packages. These features provide the data in an easy-to-use format with enough information to evaluate the quality and potential uses of the data. Currently, HEDS contains data from the three National Human Exposure Assessment Survey pilot studies that were conducted in EPA Region 5, Maryland, and Arizona.

The data in HEDS are expected to be used to

- provide inputs for exposure assessments.
- identify subgroups of the general population that may be highly exposed or particularly susceptible to chemicals in their environment.
- relate known pollution sources to the actual exposure that people experience.
- provide a baseline of the normal range of exposure to chemicals in the general population.
- evaluate and improve the accuracy of models developed to predict exposure of people to chemicals.
- test different techniques for performing multimedia human exposure studies.

The information in HEDS will help communities, states, regions, and other organizations assess the potential health risks from various chemicals and decide whether steps to reduce those risks are needed.